

REMARKS

The comments of the applicant below are each preceded by related comments of the examiner (in small, bold type).

Claims 1-9 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Bounsaythip and Rinta-Runsala "Overview of Data Mining for Customer Behavior Modeling" - Finland: VTT Information Technology, Research Report TTE1-18, 2001 (hereinafter "Bounsaythip").

Regarding independent claim 1, Bounsaythip did not describe and would not have made obvious "transforming the variables into the Bayesian renormalized variables," let alone "adjusting a response frequency associated with a variable by a Bayesian analysis based on a priori response frequency associated with the variable" or "associating the variable with a weight to regress the response frequency toward a mean response frequency." As an example, the Bayesian renormalized variables can reduce variability or instability of estimations (see, published patent application, e.g., paragraphs [0074] and [0075]).

Regarding "Bayesian renormalized variables," the examiner stated:

Bounsaythip discloses ... Bayesian renormalized variables (see Pate 32, Section 3.8 Other data mining methods; and Page 18, Section 3.4.4 Advantages/Disadvantages)

However, Bounsaythip merely described normalizing inputs for a neural network into values between 0 and 1 (page 18, section 3.4.4) and using Bayesian belief networks for clustering customer or web users (page 32, section 3.8). Even if the two sections 3.4.4 and 3.8 were combined, the result would only have been using the Bayesian belief networks of section 3.8 for data mining and use the data in building a neural network of section 3.4.4 (page iii, contents). The examiner picked the word "normalize" from section 3.4.4 and the other word "Bayesian" from section 3.8 without considering the contexts in which these words were used. The words lost their meaning out of their original contexts and the so combined term "Bayesian normalize" would not have meant anything to one skilled in the art and did not describe anything related to "Bayesian renormalized variables."

Regarding "adjusting a response frequency associated with a variable by a Bayesian analysis based on a priori response frequency associated with the variable," the examiner stated:

Bounsaythip discloses ... transforming the variables into the Bayesian renormalized variables (e.g., normalized between 0 and 1) (see Page 18, Section 3.4.4 Advantages/Disadvantages) including adjusting a response frequency associated with a variable by a Bayesian analysis based on a priori response frequency associated with the variable (e.g., APrioriAll algorithm) (see Pages 25-27, Section 3.6.3 Algorithm and 3.6.4 Illustration),

However, instead of “adjusting a response frequency,” all Bounsaythip described in section 3.6 (including sections 3.6.3 and 3.6.4) was discovering associations among transactions (page 23, section 3.6, and page 25, section 3.6.3). As was illustrated in section 3.6.4, based on the transactions 001-007, products (here, A, B, and M) in the transactions that have 30% occurring frequency (so called “support” defined on page 23) were identified. The goal was to discover correlations of the identified products in the transactions. For example, if product A was involved in a transaction, the probability (predictability or “confidence” as defined on page 24) of product B also being involved in the transaction was to be discovered. As was shown in the result of this discovery process, the confidence of B in a transaction involving A was 100%, while the confidence of A in a transaction involving B was 60% (page 27). The discovery process did not adjust “a response frequency,” but at most discovered correlations among transactions based on occurrence frequencies of products involved in the transactions.

... The prior art clearly teaches normalizing values between 0 and 1; and the prior art clearly teaches various methods of data mining. An example of the normalizing given on Page 6 is normalizing values for neural networks. Clearly, this is an example and can be applied to the numerous other methods of data mining (e.g., decision trees, Naïve-Bayes, nearest neighbor) (see Page 11) taught in the prior art. Under such consideration, the prior art anticipates transforming variables into more predictive variables that include Bayesian renormalized variables.

Again, page 6 described normalizing inputs for a neural network into values between 0 and 1, while page 11 listed several regression techniques that include Naïve-Bayes. Neither parts described “Bayesian renormalized variables.” The picking and combining of the words “normalize” and “Naïve-Bayes” would have produced “Naïve-Bayes normalize”, which would not have conveyed any meaning to one skilled in the art.

Bounsaythip did not anticipate claim 1, at least because Bounsaythip neither explicitly nor inherently described the features of claim 1. For at least the reasons discussed above, Bounsaythip also did not make claim 1 obvious.

All of the dependent claims are patentable for at least similar reasons as those for the claims on which they depend are patentable.

Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicant has (a) addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

Please apply \$555 for the Petition for Extension of Time fee and any other charges or credits to deposit account 06-1050, referencing attorney docket 17146-0005001.

Respectfully submitted,

Date: _____

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